DOCUMENT RESUME

ED 030 318 EM 007 261

The Center for Educational Television.
Center for Educational Television, Inc., Manila (Philippines).
Pub Date [68]
Note-32p.
EDRS Price MF-$0.25 HC-$1.70
Descriptors-Audiovisual Centers, Audiovisual Instruction, Broadcast Television, Closed Circuit Television, Curriculum Enrichment, Developing Nations, Equipment Utilization, Fixed Service Television, Information Dissemination, Inservice Teacher Education, *Instructional Television, National Libraries, *National Programs, Networks, Resource Centers, Telecourses, *Televised Instruction, Television Curriculum, Video Tape Recordings
Identifiers-The Philippines

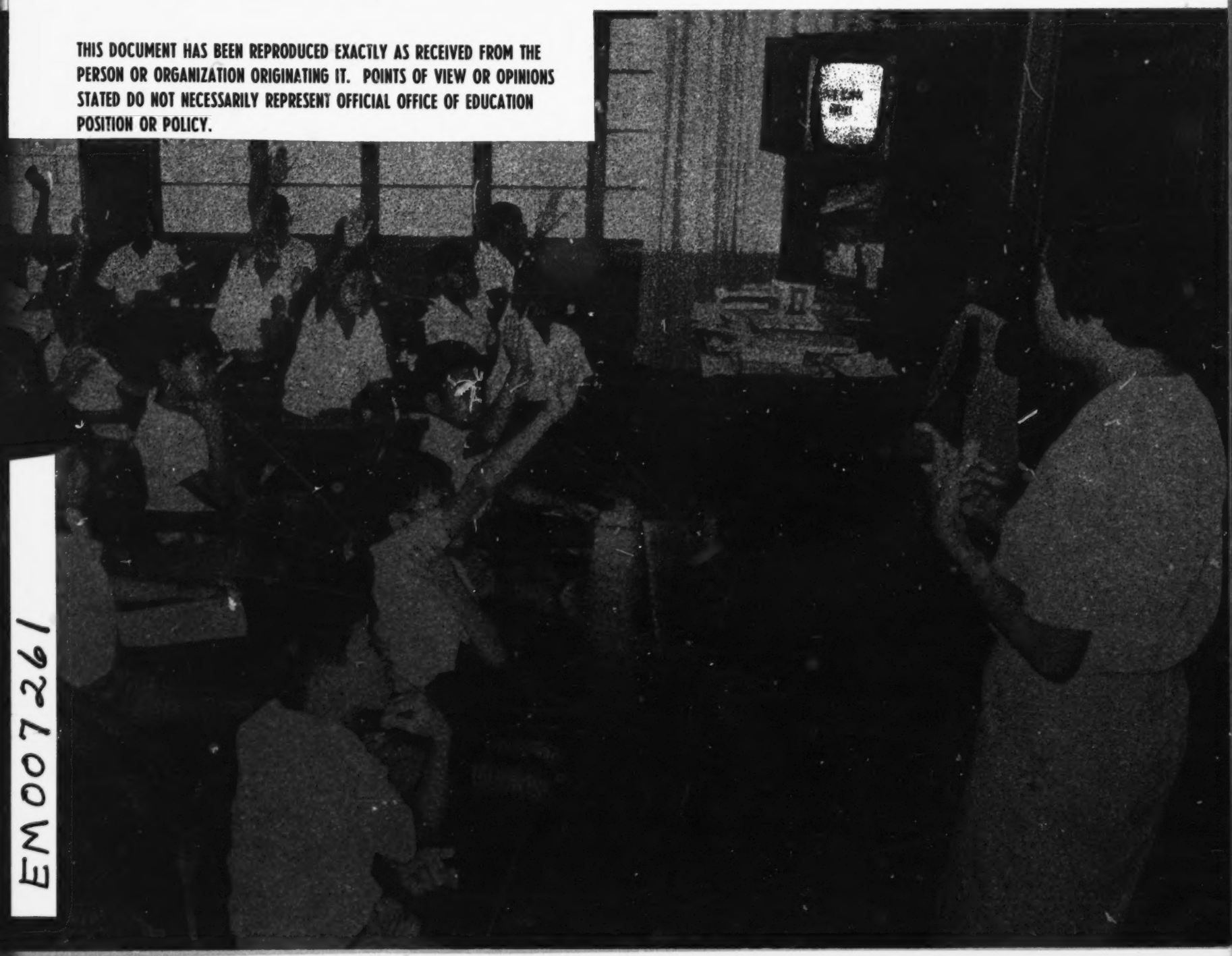
Although 26% of the Philippine national budget is spent on education, serious problems still exist. To update and revitalize the curriculum, to bring efficient teaching to isolated classrooms, and to make available modern audiovisual aids the Center for Educational Television on the campus of Ateneo de Manila University in Quezon City broadcasts telelessons for 6 hours a day, 5 days a week, 10 months of the year, to 30,000 Philippine students in 112 schools. The Center supplies training, programing transmission, production, publications, and school coordination services. Three systems of broadcast are used--2500-megahertz, closed-circuit, and open broadcast. The Center plans to establish an instructional television service and, later, a national media service. Other plans include extending coverage to the provinces, a telecourse library, and a tape duplication service. In order to provide the additional service, the Center will buy more equipment, train more personnel and erect a new production service building. (JY)

EDO 30318

THE CENTER FOR EDUCATIONAL TELEVISION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.



EM007261

This is Juanito Quintero

of Sangandaan, Caloocan

Eleven-year-old Juanito is lucky but he doesn't realize it. He benefits from a new program introduced into Philippine education: instruction by television.

Each year, the Philippine government spends roughly 26% of the national budget for education. Still, serious problems, which are common to all schools in varying degrees in the cities, suburbs and provincial areas, remain unsolved year after year.

* There aren't enough schoolrooms for 11% of all First Graders.
* Out of 100 pupils enrolled in Grade One, almost half will drop out before Grade Six and only 17 will finish high school.
* Textbooks are few; audiovisual aids, rare; and quality instruction, a luxury.
* There is an acute shortage of teachers in specialized subjects like Modern Math, English, Social Studies and Art. Overworked, overburdened, often inexperienced teachers on the elementary level are responsible for six or seven subjects each day.

Juanito studies in Caloocan, a city north of Manila. Despite limited school resources in his locale, he is being taught by a capable and experienced teacher who instructs him from a TV screen. At the same time, he has in the classroom with him a teacher who knows his personal and pedagogical background, his problems and talents.

Juanito's teachers form a team: the TV teacher presents the lesson and the classroom teacher devotes her time to individualized instruction.

Used as an integral part of a school's academic program, teaching by television opens wide a whole new avenue of educational opportunities. Instruction by television updates and revitalizes Juanito's curriculum by providing new courses of study and the latest teaching techniques. Moreover, ITV allows even the most isolated classroom to receive effective teaching. Juanito receives the services of excellent teachers, he gets a "front row seat" in the learning process, and he benefits from the most modern audiovisual aid materials like films, slides, still pictures and three-dimensional models. He may even take a trip to Laos or to Vietnam in the span of a 20-minute television lesson.

Instructional television can raise the quality of instruction throughout the nation: it offers a solution to the teacher-shortage problem; and it provides equal learning opportunities to a vast number of school children.

Juanito may not realize it, but he has a world of learning at his finger tips — a wealth that thousands of students throughout the Philippines can share through instruction by television.

This is Juanito's School

Andres Bonifacio Elementary School in Sangandaan, Caloocan City is a two-story public school with 3,000 students and 78 teachers. Like most schools in the country today, it is confronted with two major problems: the lack of a dynamic, modern curriculum and the shortage of adequate, competent teachers. Yet these problems can be alleviated by this school with assistance from the Center for Educational Television.

Mr. Filemon Cruz, Principal of Andres Bonifacio Elementary School, points out that instructional television has done wonders for his school. He says, "It has made available to our students the services of excellent teachers and has introduced into our curriculum new courses which we would otherwise not have at all." Mr. Cruz has a wide selection of telecourses to choose from — from Art to Geography, from Science to Pilipino.

Mrs. Helen Castro, a classroom teacher, says: "It's amazing how Philippine Geography can be more interesting on television with live guests and audiovisual aids. And, we learn new teaching techniques by watching other teachers in action."

Eleven-year old Juanito exclaims, "I feel I have travelled from Aparri to Jolo. Our teacher has brought us to these places in her television lessons. My TV teacher brings into the classroom pictures, guests, and films which my home teacher can't."

Mr. Porfirio Roque, father of two students from Andres Bonifacio Elementary School, has this to say: "Instructional television has motivated my son to study more about things on his own. At home he now reads more, clips pictures and watches programs about the Philippines. He has begun to appreciate articles and reports about our country."

At present, Juanito and his classmates spend no more than 20% of their class time watching TV lessons. This gives Mrs. Castro more time to prepare her students for the telecast and supervise the follow-up and assimilation drills.

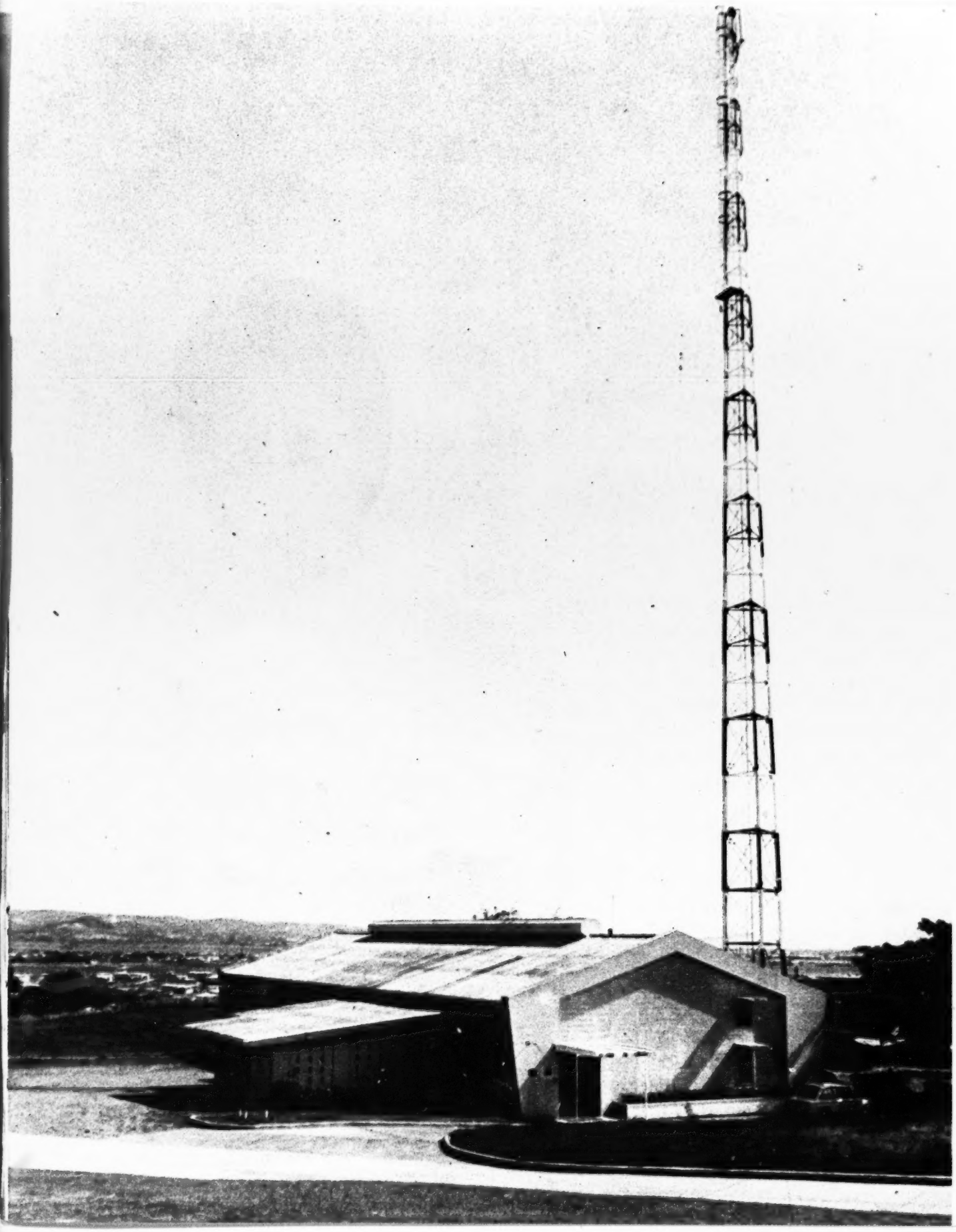
Through its use of instructional television, the Andres Bonifacio Elementary School has found a way of minimizing its perennial problems. But the need to raise and maintain the quality of education is not confined to suburban and city schools alone. It is common to public and private schools in all communities — big and small, rich and poor.

This is the Center for ETV

Located on the campus of the Ateneo de Manila University in Quezon City, the Center for ETV is a non-stock, non-profit foundation set up according to the requirements of the National Science Development Board and registered with the Securities and Exchange Commission.

Center: Services

The Center supplies six services to all its receiving schools: training, production, programming-transmission, maintenance, publications, and school coordination. Five departments are in charge of these services.



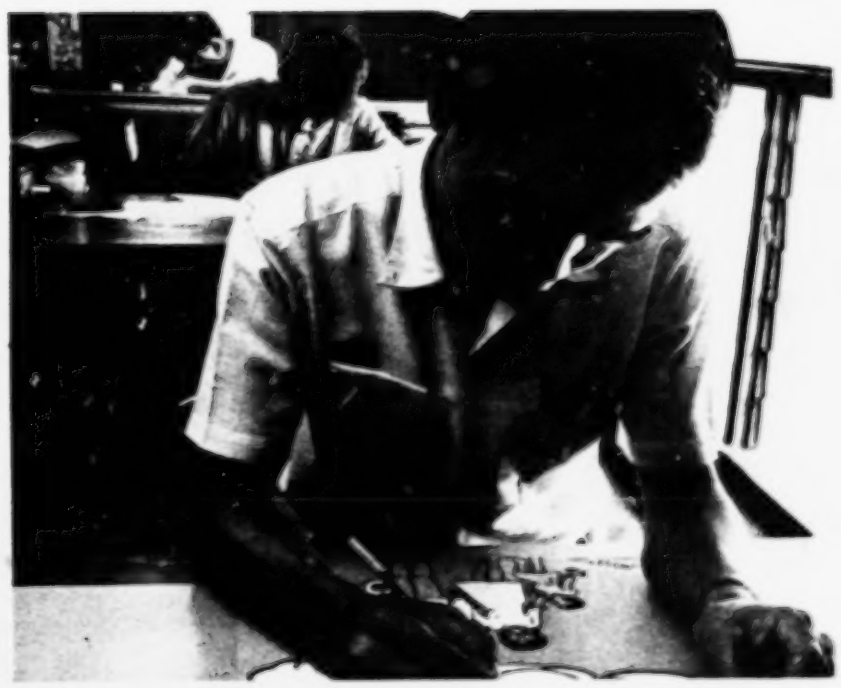
Production Department

The Production Department prepares lessons on videotape in the studio. Actual taping in the studio is merely the second to the last step in the complicated process which must take place before any lesson is ready for Juanito and his classmates.

To see what goes into the preparation of one lesson let us follow a studio instructor for World Geography 5, as she plans her telelesson on "Laos."

This lesson aims at explaining the contented attitude of the Laotian people despite their lack of progress. There's a lot of research to be done: magazines to look through, books to read and information to digest. Since there is no Laotian Embassy in Manila, the TV teacher must look to other sources for pertinent information. So, she checks the Operations Brotherhood office in the hope of interviewing anyone who was formerly assigned to Laos. She also contacts the Ramon Magsaysay Foundation office for any information they might have from Laotian awardees. Once all

KAMBUJA

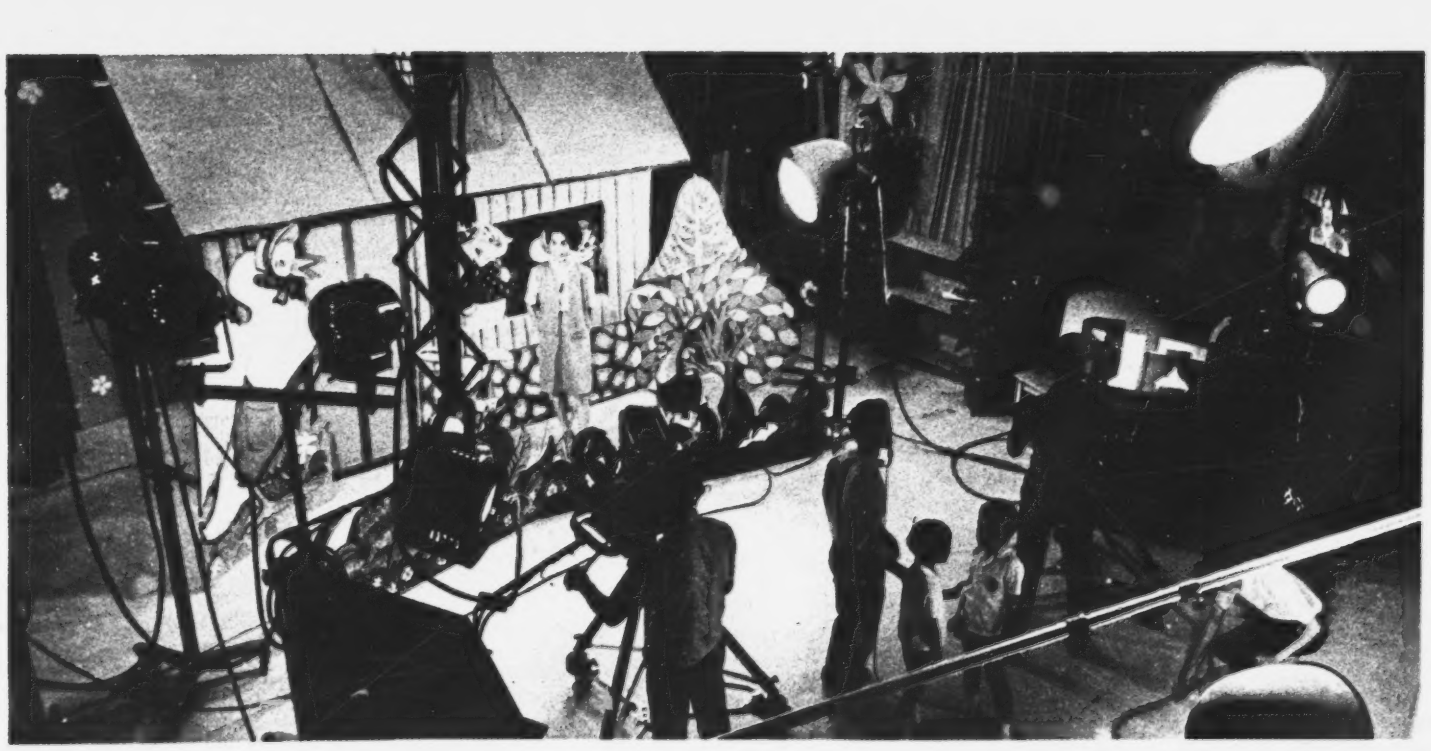


the facts are gathered, the TV instructor writes her script.

It is this script which she presents to her TV Director for visualization. Together they decide on which audio-visual aids to incorporate into the lesson. They view films and film clips. The audio-visual librarian suggests slides and still pictures. Artists are asked to draw maps and prepare title cards. Props and posters are borrowed. Music and sound effects are chosen.

When all the materials have been collected, both TV teacher and director decide on the arrangement of visuals. They pace the lesson, paying special attention to timing. The lesson is now ready to be brought to the studio.

In the studio, the director instructs the crew men regarding the set to be used. Lights are turned on. Cameras are positioned. Movements, shot sizes, and special effects are rehearsed. Then the lesson is taped.



But there is still one final step to perform: the lesson must be evaluated. If it is satisfactory, it can be telecast. If not, changes must be made.

The steps in the preparation of a lesson are many and complex. The efforts of over 10 people have gone into the making of this one lesson. Juanito and his classmates will perhaps never be aware of the energies expended for their benefit. The rewards are not immediately tangible. They come later with better instruction for thousands of students and the raising of educational standards in the country.

nais ipahay
ngungus
Pagpapa
pangu

Training Department

The Center aims to introduce instructional television into more and more public and private schools. To accomplish this objective, training programs are conducted all year round for school administrators and classroom teachers.

During the summer, there is a special seminar-workshop in instructional television for school administrators from the provinces. During the school-year, the Center holds two semestral seminar-workshops for school administrators from the Greater Manila area. These training programs explain the basic concepts of instructional television, describe and demonstrate its usefulness, compare its advantages with its disadvantages and show how it can be introduced into a particular school or region. In fact, the training programs were primarily responsible for the participation of 112 public and private elementary and secondary schools. It was by joining such a seminar that the principal of Andres Bonifacio Elementary School decided to include televised lessons in Juanito's curriculum.

There are also subject area workshops held during the summer months for receiving teachers. These workshops introduce the telecourses to classroom teachers. They preview each television lesson; they read the textbook materials which are used in conjunction with the courses; and they discuss the proper use of these among themselves. Subjects covered are Art, English, Geography, Physics, Pilipino and Science. Juanito's teacher, Mrs. Castro, attended the workshop in Philippine Geography last summer.

12
WORLD
GEOGRAPHY 5
Teachers Guide
HIGH SCHOOL
PILIPINO
teacher's manual
ADVENTURES
IN
ENGLISH
METROPOLITAN EDUCATIONAL
TELEVISION ASSOCIATION

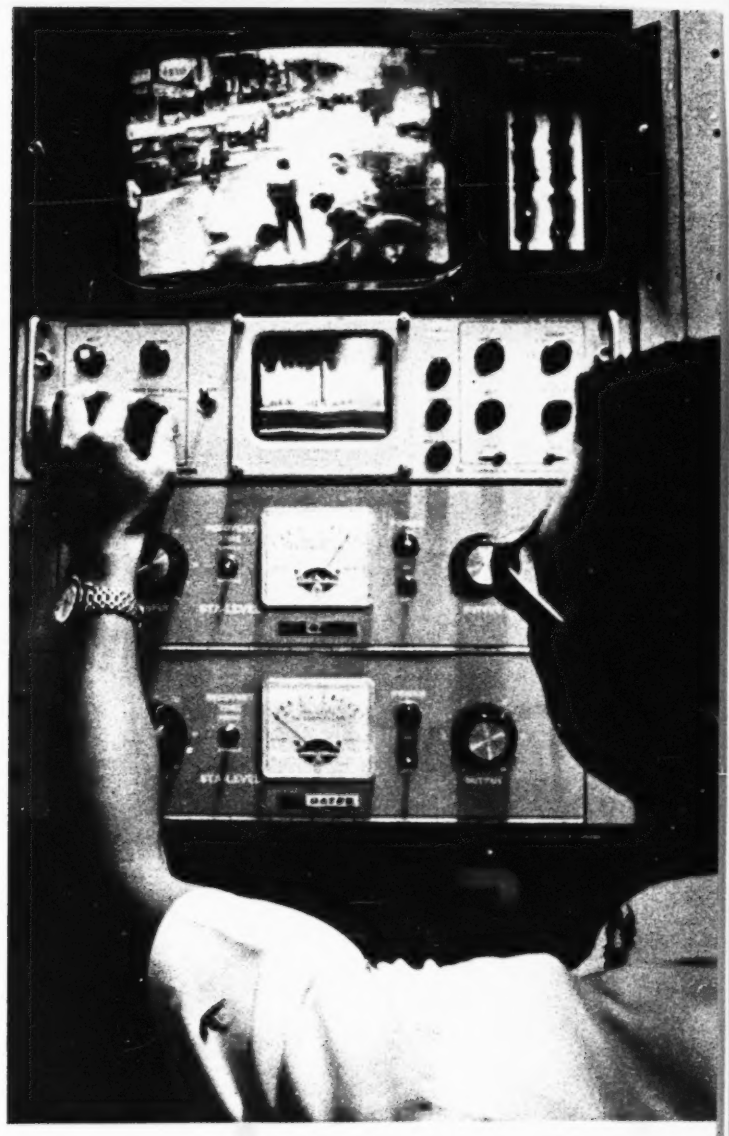
Publications Department

The Publications Office prepares and distributes materials which assist the teachers and students in utilizing the televised courses.

Mrs. Castro, the classroom teacher, is guided by a teacher's manual which outlines the aim and general content of every televised lesson. With the help of this guide, she knows in advance what will be taught, the new words to be introduced and the skills to be mastered. With the manual she can better motivate Juanito and his classmates and maintain their interest even after the TV set has been turned off. She is ready to explain more fully the points presented by the TV teacher and cope with any questions about the televised lesson which Juanito and his classmates might ask.

Through a student's workbook, Mrs. Castro can check on Juanito's comprehension and his assimilation of the points which the TV teacher developed in her lesson. The drills contained in the workbook come from the combined efforts of the TV teacher and the receiving teachers. The effectiveness of the exercises has been tested in actual classroom situations.

The Center's publications, therefore, are invaluable aids made available to Mrs. Castro and Juanito Quintero—as well as to the thousands of students and teachers who receive the Center's telecourses.



Engineering Department

While it is the Production Department's responsibility to present the lesson effectively, it is the engineer's job to transmit it. Using three different systems of transmission—the closed circuit network, the 2500 megahertz system and the open broadcast system — the engineering staff telecasts 30 telelessons 6 hours a day, 5 days a week, 10 months a year to 30,000 students in 112 schools throughout Manila, Caloocan, Pasay, Quezon City, and the provinces of Rizal, Cavite, and Bulacan.

The engineering staff is also responsible for the maintenance of all equipment used: television cameras, receivers, videotape recorders, studio and control-room equipment. The center's engineer and his men see to it that when the classroom teacher turns on the TV set, Juanito and his classmates receive the right telelesson clearly.

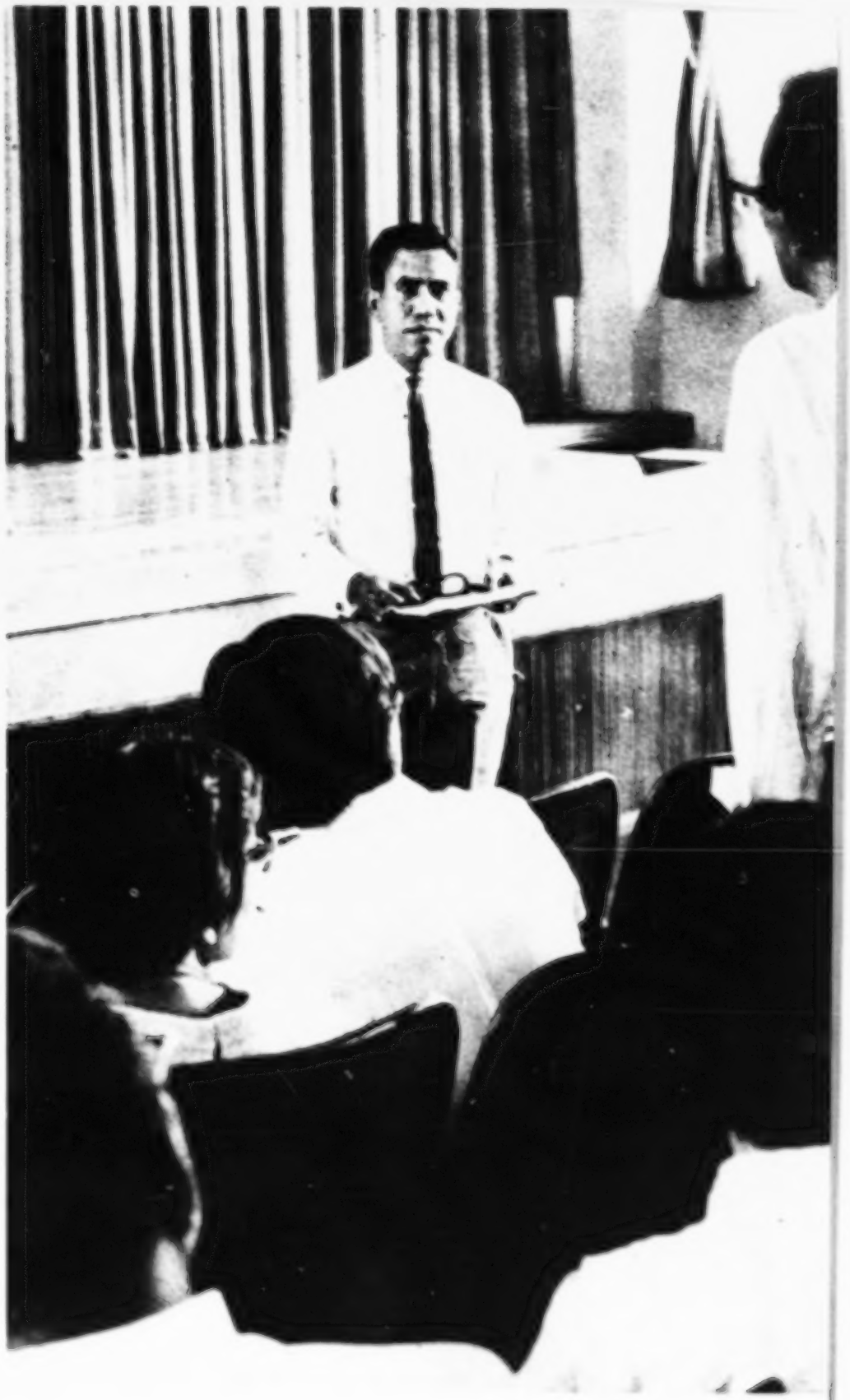
Academic Coordination Department

The Center produces Juanito's lesson, transmits them to his school and provides him with books and manuals. But this is not all that the Center does for him. Most important of all, it establishes and maintains contact with Juanito's school to see whether or not he is getting the most out of his television lessons. This is the responsibility of the Academic Coordination department.

The Academic Coordinator schedules regular preview sessions for the classroom teacher one week before the TV lesson is received. This way, Juanito's teacher has time to study the telelesson and to prepare motivational and follow-up activities.

Regular meetings of school administrators and receiving teachers are also conducted at the Center. During these meetings, the school principals give their reactions to the telelessons by pointing out the merits and shortcomings of each. Receiving teachers give feedback reports on how students responded to the lessons. During these meetings too, Juanito's teacher meets teachers from other schools and they exchange ideas, thus enriching their teaching experiences.

The Academic Coordinator then sums up and evaluates the teachers' comments and suggestions

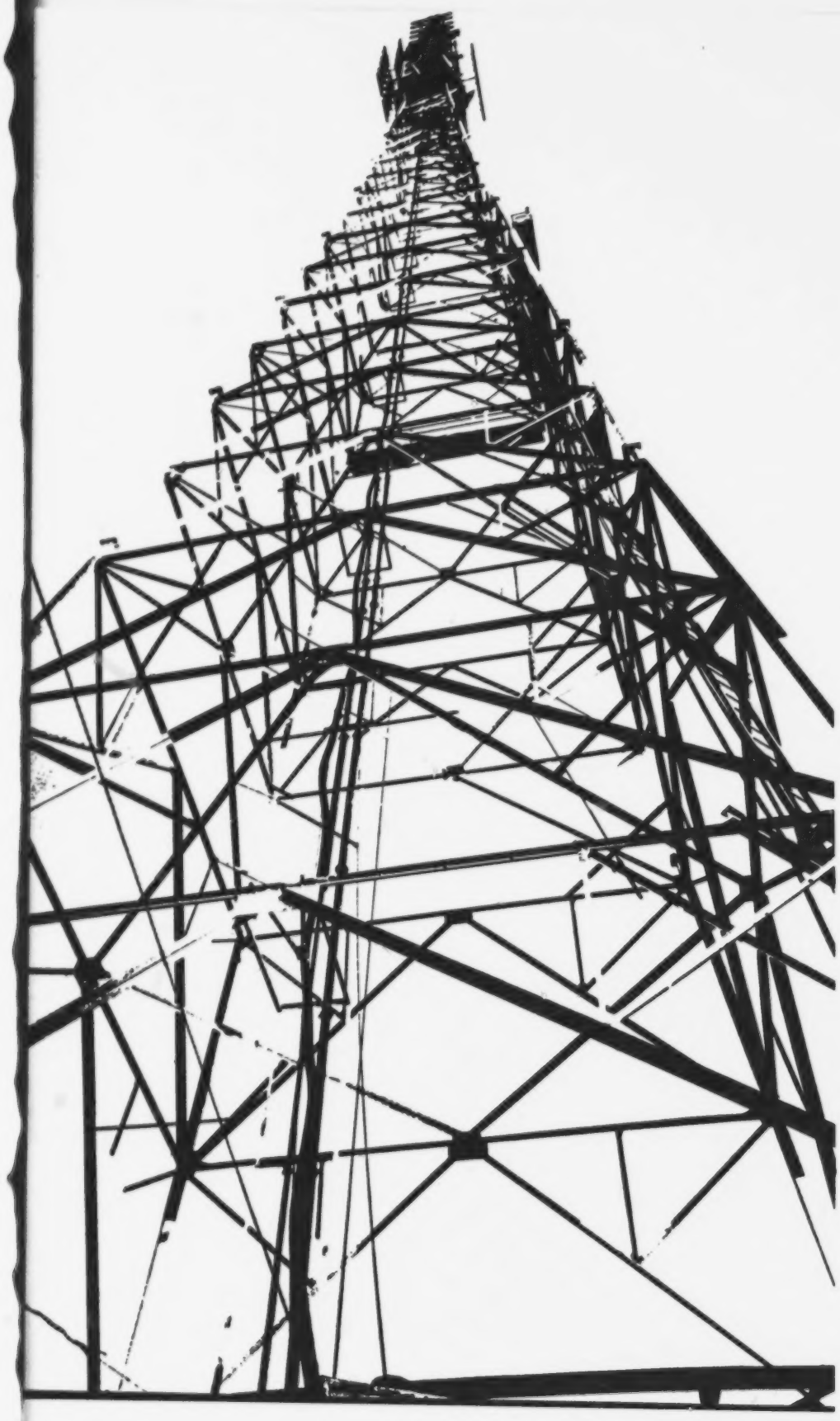


and incorporates these in the guides and sometimes in the next telelesson.

At times, the TV teacher also visits schools and observes classes. This gives Juanito and his classmates an opportunity to meet their television teacher in person and to get to know her.

To assure the Center of regular feedback from receiving schools, receiving teachers are given evaluation sheets to fill up and submit to the Center.

With these meetings, conferences, and observation sessions, the Center establishes and maintains contact with the schools it services.



Center: Geographical Coverage

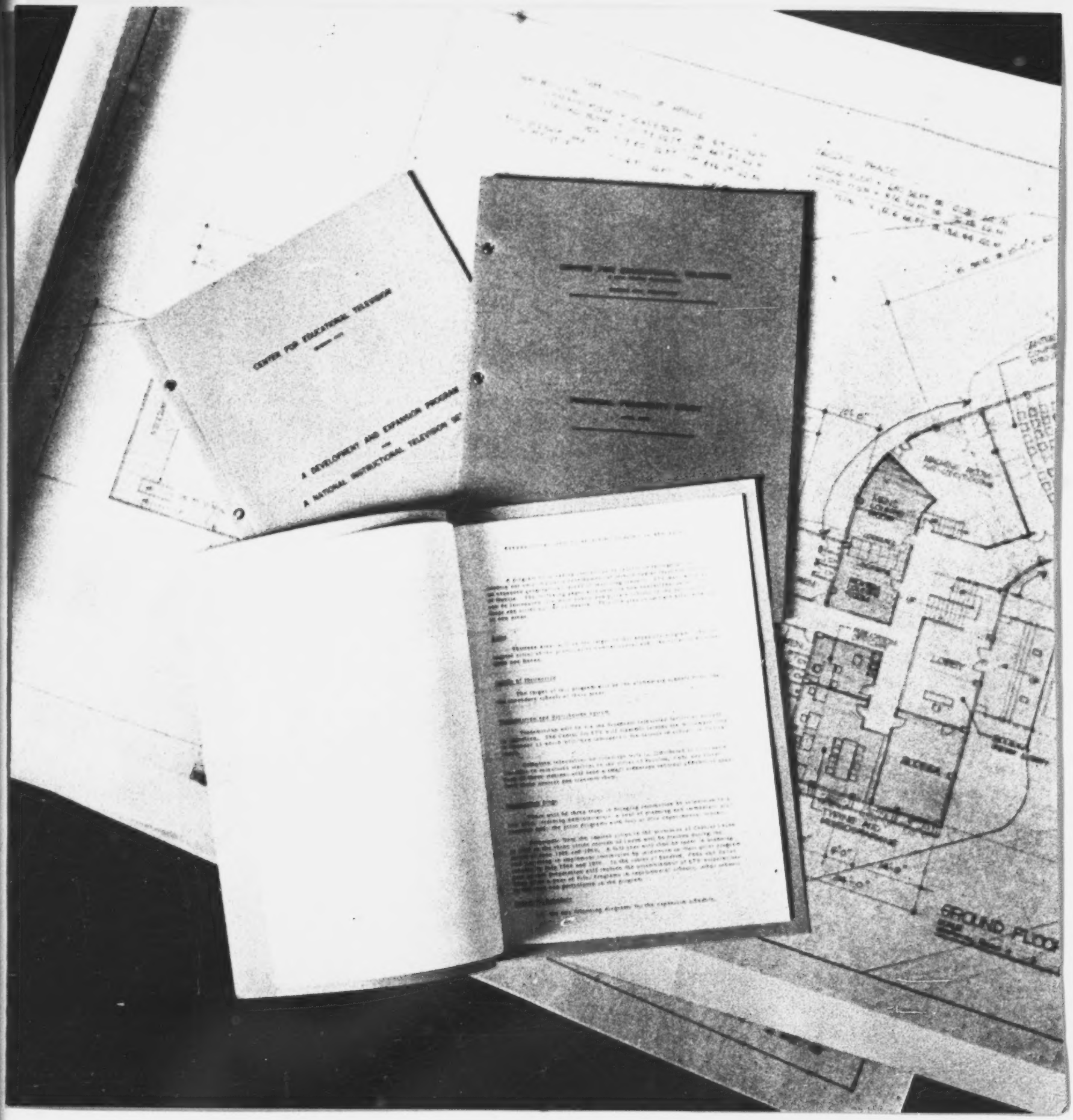
The Center provides schools with televised lessons in four different ways.

The Closed Circuit Network

The closed circuit television system operates through cables which are like telephone lines. The network therefore only goes as far as its cables reach. The system serves only a small number of schools but in a big way. Linked to the Center by coaxial cable, the two elementary and secondary schools of the Ateneo and Maryknoll can receive as many as six different lessons at the same time. Although the network does not cover much territory, it allows creative school administrators and Center researchers to try out new teaching experiments.

The 2500 Megahertz System

Through this system, signals sent from the Center are picked up by schools equipped with a special receiving antenna. Four simultaneous programs can be sent out to schools within a 20-kilometer radius of the Center. In effect, this system can reach all of the elementary and secondary schools and colleges in the Greater Manila area, an advantage it has over the closed-circuit system.


CENTER FOR EDUCATIONAL TELEVISION
A DEVELOPMENT AND EXPANSION PROGRAM
A NATIONAL INSTRUCTIONAL TELEVISION
GROUND FLOOR

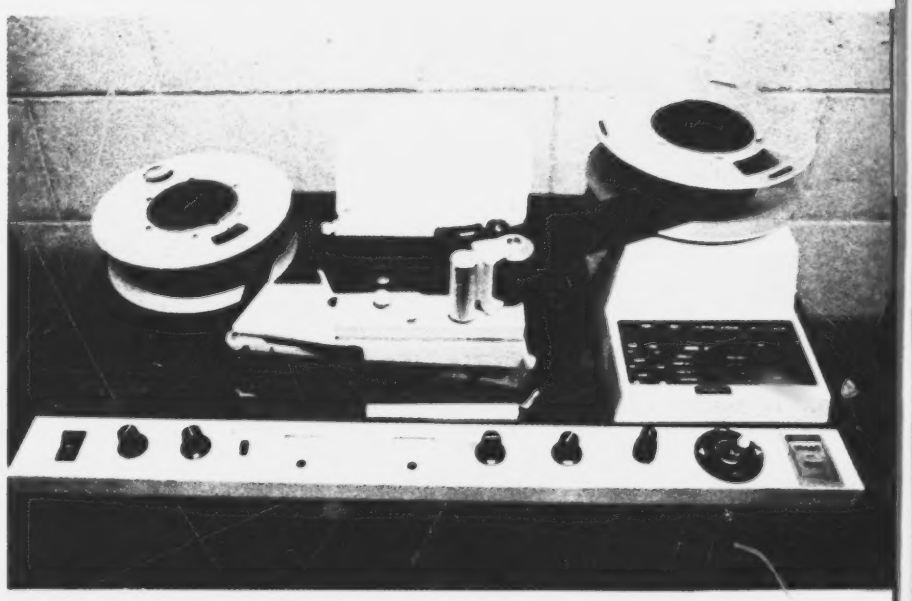
The Open Broadcast System

Juanito Quintero's school in Caloocan City receives its telelessons by open broadcast transmission. This system consists of a microwave link from the Center to a commercial broadcast station — Channel 13. Channel 13 then broadcasts these lessons not only to the Greater Manila area but also to extensive areas of Central Luzon. Thus, even schools in the provinces (such as, Batangas, Cavite, Laguna, Rizal, Bulacan, Pampanga, Nueva Ecija, Tarlac and Pangasinan) can receive instruction by television.

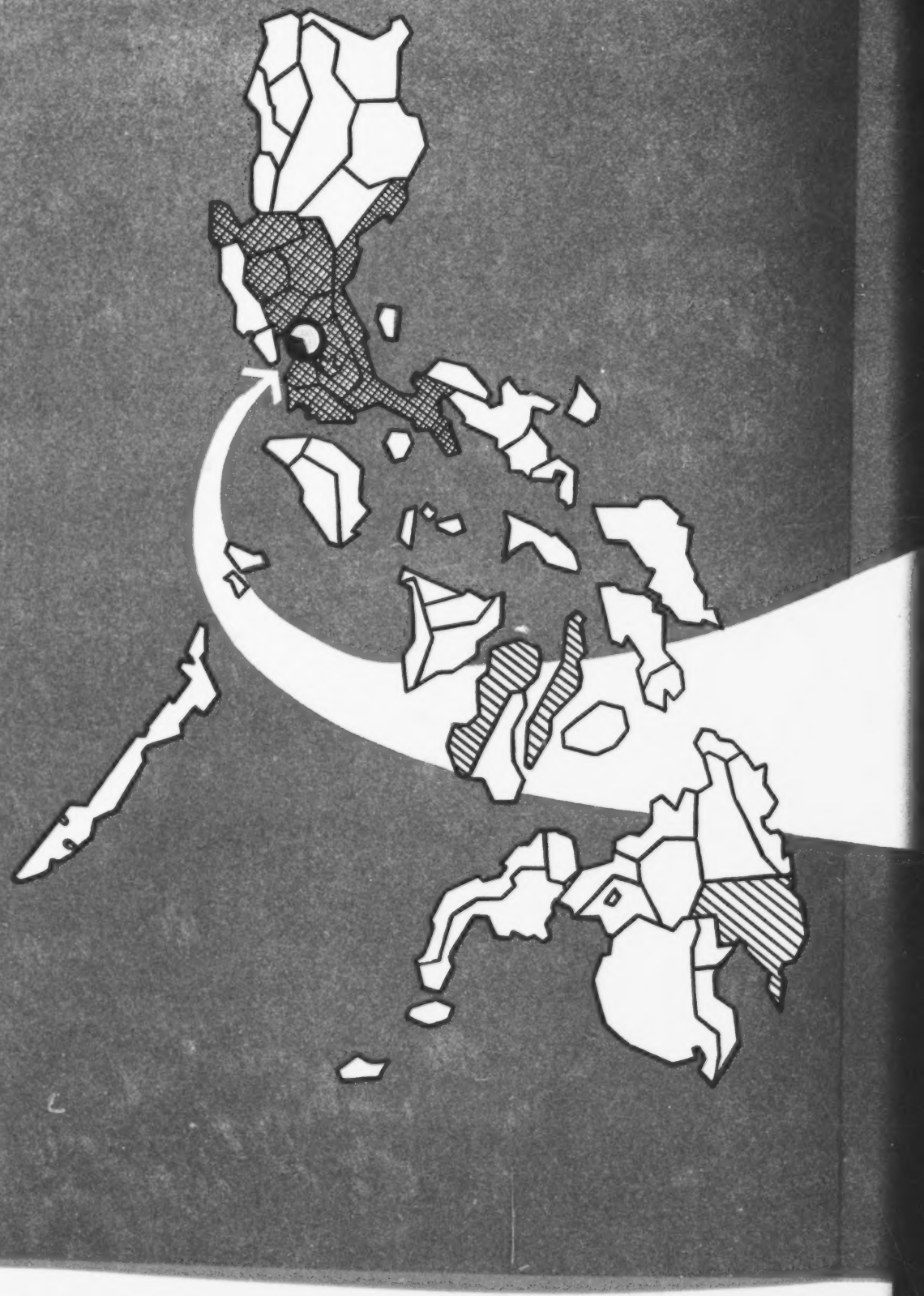
Videotape Distribution Service

The fourth means of distributing lessons is through videotape. The Center sends entire courses on videotape to ETV Associations in the cities of Bacolod, Cebu, and Davao. These telecourses are then broadcast via local television stations to receiving schools in the area. In this way, the Center can also provide videotaped lessons to individual schools which have small videotape recorders and closed-circuit systems of their own.

The coverage of the Center is now limited to areas of the country which have commercial television. As commercial television extends its geographical coverage with the addition of television relay stations and translators, the Center will also be able to provide more and more students all over the Philippines with instruction by television.



ETV Map of the Philippines



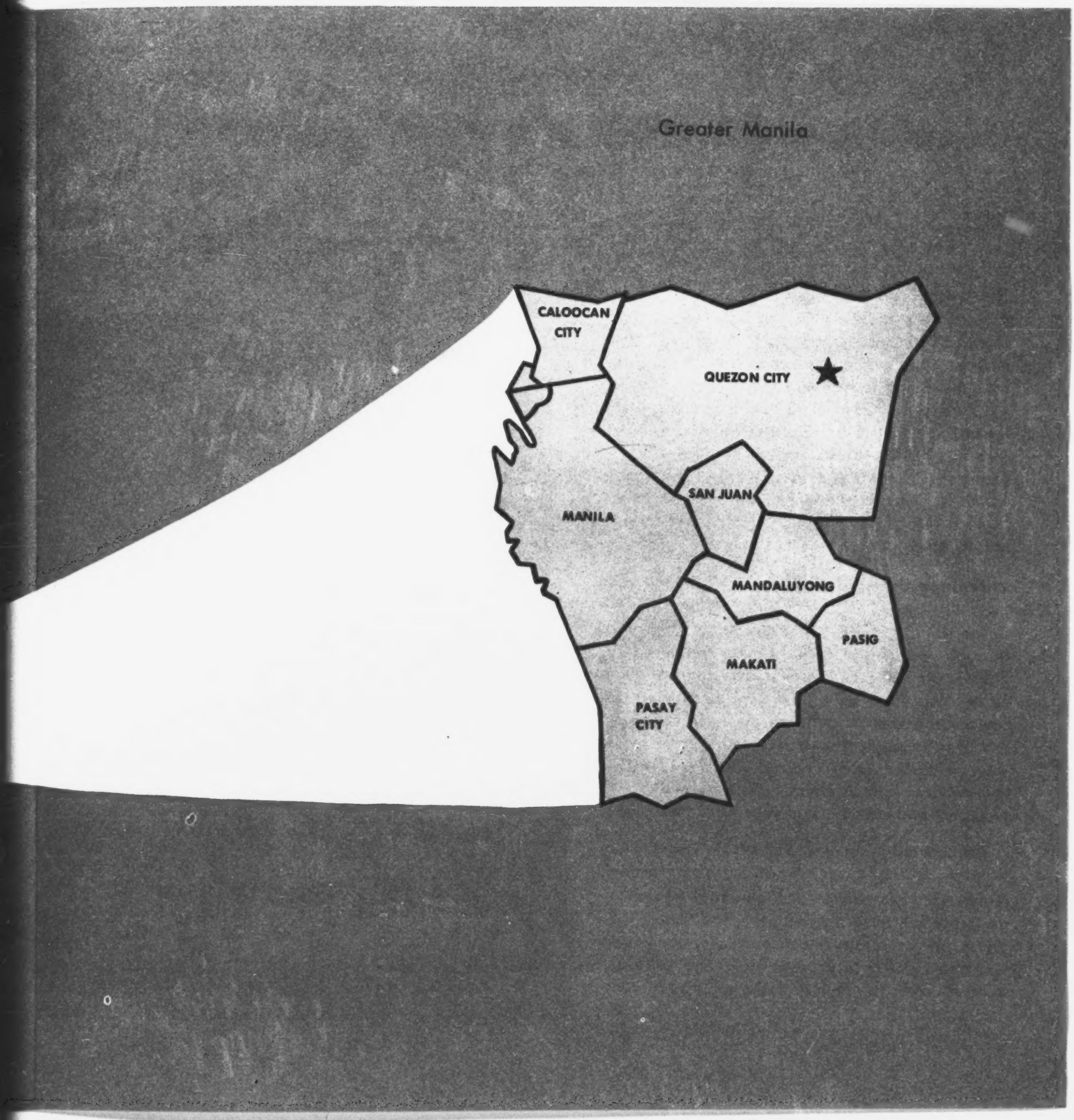
★ Closed Circuit Network

2500 Megahertz System

Open Broadcast System

Videotape Distribution Service

Greater Manila



Center: Plans for the Future

The Center is initiating the second of a three-phase program towards an Educational Media Center. The past four years constituted the first phase: one of pilot program studies. These initial activities included trying out planned experiments, initiating policies and procedures for the first time and working personnel into new routines and teams. There has been modest but recognizable success.

Educational leaders, school administrators and classroom teachers are convinced that instruction by television, perhaps the most important form of educational technology, can raise the quality of Philippine education.

Now, the Center has embarked on a development program aiming to establish a national instructional television service and later a national educational media service. The immediate objective of the development program outlines the steps for more and better services for many more schools throughout the country. Development is planned in three areas: geographical coverage, better services and resources.

Coverage

ETV services should be extended to as many schools throughout the nation as possible. Instruction by television must be brought to the provinces where the need for it is perhaps greater than in the city or suburbs. It must also be used for the countless number of students in the widely populated areas of Bacolod, Cebu and Davao.

There will be pilot receiving schools in all of these new areas by July 1969. School administrators of the initial receiving schools have already been trained. In July 1969, experimental programs will be set up in the provinces of Bulacan, Nueva Ecija, and Tarlac, as well as the cities of Bacolod, Cebu and Davao.

By July 1970, there should be 10 elementary schools and 10 high schools in the Greater Manila area receiving instruction via television through the 2500 megahertz system. There should be over 100 elementary schools and 100 high schools throughout the Central Luzon area receiving tele-

courses through Channel 13. Finally, videotaped programs will be transmitted to 10 schools through the television stations of Bacolod, Cebu and Davao.

Services

New and improved services should be added if the Center is to adequately provide the basic ITV services for all schools all over the country. These services include:

Research. A comprehensive research program is of primary importance. The validity of ETV as a teaching tool and its advantages over traditional teaching methods must be measured. Scientific research can discover the conditions necessary for presenting effective TV lessons under local circumstances. Finally, research is demanded so that careful analysis and evaluation of all efforts can be made.

Production. More telecourses on videotape must be produced. A minimum number of courses is necessary to make instruction by television economical for schools: to make the price of television sets and the training of teachers worth paying for. The preparation of these courses will extend until 1973 when there will be a basic telecourse library for grade schools and high schools.

Telecourse Library. At present, the Center has ten elementary courses and five secondary-level courses. It hopes to stock a minimum telecourse library of approximately 20 elementary courses and 12 secondary courses. This will give

school administrators and teachers a wide selection to choose from and make the introduction of this service into their schools more valuable.

Duplication. While master videotapes are stored in the Center Telecourse Library, there must be facilities to multiply these tapes for the libraries in other cities and in individual schools.

Transmission and Distribution. Once completed, telecourses must be made available to as many schools as possible. Channel 13 now transmits lessons to schools of the Greater Manila area; it can reach schools in all the provinces of Central Luzon including Batangas, Cavite and Laguna in the south, and Bulacan, Nueva Ecija, Pampanga, Pangasinan and Tarlac in the north. Still another method of bringing telecourses to school children is by the distribution of videotaped lessons to television stations of Bacolod, Cebu and Davao, for transmission to schools in those areas. Pilot programs in these three areas should first be initiated.

Training. So far the best means of introducing instruction by television to a new area has been the training of school principals and assistant principals in a special seminar-workshop in instructional television for school administrators. This training program explains the idea of instructional television and indicates how it can be introduced into a particular school. The Center for ETV plans to extend these training sessions to more school administrators from the provinces.

Resources

An expansion in the Center's services demands an increase in its resources: personnel, equipment and physical plant.

The present staff of 42 is finding it difficult to handle the ever-increasing volume of work. New personnel must be trained to perform the specialized services offered by the Center.

At the same time, if the production and transmission of telecourses is to reach and maintain a high-quality level, newer and more sophisticated equipment must be acquired.

Finally, the Center for ETV, which plans to expand on a national scale, cannot continue to operate in a single small building which was once a university central kitchen. The lack of building space creates a serious problem. This must be remedied by the construction of a production service building as soon as possible.

The third phase of the development program will be an Audio-Visual Center where all audio-visual graphics and photographic materials will be produced and distributed to schools throughout the country.

This multi-media development program was begun with the medium of television for economical and practical reasons. The use of television in education provides a most economical and immediate solution to the chief educational problems of a developing economy. It can combine many of the good aspects of all the other media, e. g. films, audio and video tape, graphic and photographic materials, in a word, all the new technological aids to education. Furthermore, it is felt that with this beginning, all other media can be more easily introduced into education on a large scale.

Center: Costs

The expenses in the five year development and expansion program total ₱2,143,500. These expenditures are for the Center but there will be other expenses for ETV Associations and receiving schools.

The Center expenditures are primarily for a new building and more-up-to date equipment.

In 1968-1969, Production will need audio-visual equipment.

In 1969-1970, Production will require new studio cameras, a large videotape recorder, master tapes for a telecourse library and a still photo laboratory and dark-room equipment. Engineering will need a small playback videotape recorder.

In 1970-1971, the Engineering Department will need another small videotape recorder for the increased volume of programming-transmission.

ETV Associations (an organization of educators in a particular locality who want to utilize instruction by television) in Bacolod, Cebu and Davao will require organizational funds and capital expenditures for videotape recorders and videotape.

Juanito's school in Caloocan primarily needs television sets. If there are going to be many sets in the school, it is best that there be a master antenna on the roof and an inside distribution system of coaxial cables. Aside from these costs, there will be a minimal service fee for each student receiving a course by television.

In terms of the nation's general welfare, the sum is not large. In terms of maintaining for our people a significant addition to the nation's educational resources, it represents a valuable investment — one that requires wisdom and foresight. For Juanito Quintero and his generation the success of the venture could mean a passport to prosperity and well-being.

CENTER EXPENDITURES: May 1968 to April 1972

Building		₱ 500,000
Equipment		773,100
Production	683,200	
Image Orthicon Cameras		
Videotape recorders		
Still Photo Lab		
Filming and processing facilities		
Slide-making equipment		
Transmission	60,000	
Test equipment		
Monitors		
Other	29,900	
furniture		
office equipment		
Production costs of videotape library (Net of revenues on videotape broadcasts)		870,400
TOTAL		**₱2,143,500**

BOARD OF DIRECTORS

Dr. Vitaliano Bernardino
Rev. Robert Bomeisl, S.J.
Justice Pompeyo Diaz
Rev. Thomas Fitzpatrick, S.J.
Rev. Leo H. Larkin, S.J.
Mr. Eugenio Lopez, Jr.
Mr. Roberto V. Ongpin
Mr. Sixto K. Roxas
Mr. Andres Soriano, Jr.
Mr. Leonides Virata

ADVISORY COUNCIL

Rep. Aguedo Agbayani
Dr. Narciso Albarracin
Dr. Vitaliano Bernardino
Sec. Onofre D. Corpuz
Senator Eva E. Kalaw
Dr. Juan Manuel
Mr. Romulo Y. Mendoza
Dr. Arturo M. Guerrero
Mr. Waldo Perfecto
Mr. Alejandro Roces
Atty. Virgilio de los Santos
Mr. Fructuoso Yanson

STAFF

Rev. Leo H. Larkin, S.J.
Director
Miss Aurora R. Achacoso
Executive Assistant
Miss Maria Rita A. Albert
Production Manager
Miss Cecilia V. Bulaong
Public Relations Officer
Mr. John A. Lauengco
Chief Engineer
Mr. Tomas P. Ledesma
Academic Coordinator
Miss Maria Teresa T. Locsin
Publications Officer

THE CENTER FOR EDUCATIONAL TELEVISION, INC.

Ateneo de Manila University Campus, P.O. Box 154 Manila